

MODIS Team Meeting Minutes

Minutes of the MODIS Team Meeting held on Tuesday November 23, 1993.

Action Items:

70. Evaluate the thermal design of the Schaeffer Magnetics' motor/encoder. Assigned to Daelemans 8/31/93. Due 10/15/93
73. Complete the MODIS brochure and released for printing. Assigned to Bauernschub 10/18/93. Due 11/15/93.
74. Prepare and submit a Configuration Change Request which revises the definition and impact of levels of software criticality for the MODIS Software Management Requirements Document. Assigned to Anderson 10/26/93. Due 12/ 1/93
75. Determine if the four electronic module boxes can be individually thermal tested in air, or must the thermal testing be done in a vacuum. Assigned to Silva 10/26/93. Due 11/ 9/93
76. Provide a schedule of the SBRC internal CDRs. Assigned to Bauernschub 10/27/93. Due 11/23/93
77. Transfer review and approval of Class II changes to David Jones. Assigned to Anderson 11/ 2/93. Due 11/16/93
78. Recommend details of agreement with SBRC for GSFC access to near-real-time test data. Assigned to Montgomery 11/16/93. Due 12/ 7/93.
79. Consider advisability of bringing bad Readout ICs to GSFC for electrical tests or destructive physical analysis. Assigned to Bob Martineau 11/23/93. Due 12/ 7/93
80. Determine what post-Software Acceptance Review (SWAR) tests need to be done to prepare MODIS for operations during the early on-orbit instrument checkout using macros. This involves determining the following:
 - 1.) Who at SBRC is responsible for generating and testing these macros?
 - 2.) When will this work on these macros be started?
 - 3.) When will these macros be defined?
 - 4.) When will these macros be tested?

Assigned to Guenther 11/16/93. Due 12/7/93.

81. Determine use of on-board calibrators during testing and on-orbit. This is a lifetime issue involving motors, diffuser degradation due to exposure to sunlight, and use of calibration bulbs. Assigned to Guenther 11/23/93. Due 12/14/93.

The following items were distributed:

- 1) Weekly Status Report #114
- 2) SBRC Memos submission from week #106
- 3) Minutes of the last team meeting

Attendees:

✓ Dick Weber	✓ Bruce Guenther	June Tveekrem
John Bauernschub	George Daelemans	✓ Bob Martineau
Rosemary Vail	John Barker	Bob Silva
Lisa Shears	Joann Harnden	Ken Brown
✓ Mike Roberto	Patricia Weir	✓ Robert Kiwak
✓ Nelson Ferragut	Mitch Davis	Harvey Safren
Gene Waluschka	Jack Ellis	✓ Ed Knight
Kate Forrest	✓ Ken Anderson	Harry Montgomery
✓ Bill Barnes	Rick Sabatino	Marvin Maxwell
Les Thompson	✓ Cherie Congedo	

Bruce Guenther indicated for testing of the Engineering Model (EM) that having the data by air express overnight after the test would be okay with the science team. For the Protoflight Model (PFM), Bruce would like to have the data within 6 hours after acquisition of the data. If the receipt of PFM test data by GSFC is electronic, there would be an advantage to setting up this link well in advance to PFM testing.

Bill Barnes mentioned Tom Pagano's presentation on convergence to NASA, NOAA, and SBRC personnel on November 19th. The MODIS instrument is rapidly being developed with the PFM delivery in mid 1996 and two more flight models being delivered on 18 month intervals. A Convergent MODIS looks doable.

Bob Martineau said fabrication has started on four lot#2 PC wafers. These should be in probe testing by late January. For the S/MWIR PFM lot of 8 wafers, testing of test structures indicate two of the wafers could give good arrays and one wafer should give very good arrays for a total of three good wafers. More PFM S/MWIR wafers will probably be needed.

Carlsbad is performing diagnostic tests to determine the cause of the Read Out Integrated Chips (ROIC's) problem for the flight PV detectors. As mentioned last week, the problem is thought to be an error in the process of forming the P-MOS transistors. GSFC will review Carlsbad's results.

Mflex is working on its third attempt to provide detector cables. These cables will be inspected on December 6th. Meanwhile, Graphics Research has delivered 6 cables (5 PC and 1 PV, the count was meant to be the other way) and is working on 9 remaining cables. MODIS needs 4 PV cables and 1 PC cable for each instrument.

The status for Engineering Model (EM) bezel filter assemblies for delivery to the detector division is as follows: VIS is installed, the LWIR is due November 24, the NIR is due November 30, and the S/MWIR is due December 1.

The EM radiation cooler requires delivery of the S/MWIR and LWIR FPAs by December 7. This schedule is being delayed by the fact LWIR#008 will not be ready until the end of January for delivery to the radiation cooler.

Tom Trautt at SBRC has completed a memo on the detector stress analysis. The memo provides interpretation of the view graph presentations in October at SBRC on the PC detector cracking problem.

Bob Kiwak will talk to John Stannard of the SBRC detector division about papers John has on detector material properties and any available detector samples John may have. Bob will try to determine the stress levels required to crack the detectors. Material properties of both PC and PV detectors as a function of

temperature over the range of temperatures the detectors will observe need to be provided to Cherie Congedo.

The Action Item list resulting from the trip to SBRC in October to study the problem of PC detectors cracking during temperature cycling was reviewed. An update on the status of the action items was received during the dry run of the CDR at SBRC in November. Bob Martineau and Mike Roberto believe a few of the action items that were identified as closed out require more work to complete the original purpose of the action item. Comments are being provided under separate cover to Ken Anderson.

Mike Roberto November 24, 1993